

C. B. WILSON. *North-American Parasitic Copepods belonging to the Family Caligidæ.*—Parts 3 & 4. *A Revision of the Pandarinæ and Cecropinæ.* Proc. U.S. Nat. Mus. vol. xxxiii. pp. 323-490, plates xvii.-xliii. December 1907.

THE parasitic Copepoda are a group of which the study is rendered particularly difficult by the great changes which take place during growth, by the remarkable and varied sexual dimorphism, and by the absence, in recent years, of anything like a serious revision of the group or of any considerable part of it. This last difficulty Dr. Wilson has courageously set himself to remove in the series of memoirs of which this is the latest. That his work will be of very great value to future students cannot be doubted. The material at his disposal is larger than in the case of most earlier writers; he has been able to examine and to identify the larval stages of a number of species in the different subfamilies; the figures which he gives are numerous, and, if somewhat inartistic and lacking in detail, are clear and apparently accurate. It is much to be regretted, however, that a little more trouble was not taken at the outset to make quite clear the relation between the morphology of the parasitic groups and that of the free-living forms. Dr. Wilson recognizes "twelve pairs of appendages, namely, two pairs of antennæ, one pair of mandibles, two pairs of maxillæ, two pairs of maxillipeds, and five pairs of swimming-legs." How this series of appendages is to be compared with that of the typical free-swimming Copepods we are not told, nor is it easy to guess. W. T. C.

MISCELLANEOUS.

The Genotype of Cidaris.

To the Editors of the Annals and Magazine of Natural History.

GENTLEMEN,—Dr. H. L. Clark's able advocacy of his views in the June number of the 'Annals' helps to make clear the precise difference between us.

Except for a few advocates of pre-Linnean and non-binominal names, we all agree to ascribe *Cidaris* to Leske. It follows by the rules that the genotype must be one of the species assigned by Leske himself to *Cidaris*. Being unable to discover on what grounds other authors had selected *C. papillata*, I applied the rules, and found these to lead to the same result. Rightly or wrongly, Dr. Clark accepts no other of Leske's species as a *Cidaris* at all, and is therefore bound either to accept *C. papillata* or to reject the generic name. Essentially he does accept it, and it is with the next step that trouble begins.

We all agree that Leske's sections I., II., and III. represent three